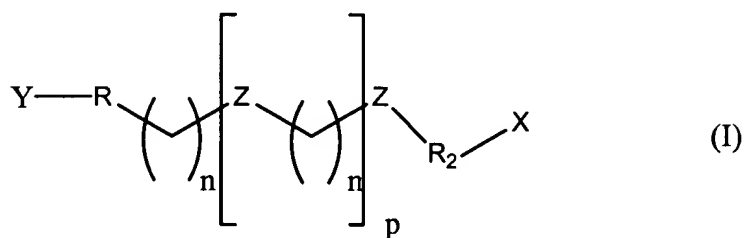


# ABSTRACT

Linker arms for nanocrystal compounds and nanocrystals  
 compounds of the following formula:



$$n \text{ \& } p = 0-10$$

$$Z = O, CH_2, \text{ or } NH$$

wherein Y represents the attachment point to the nanocrystal and X represents the attachment point of an organic compound. R is a bond or is selected from the group consisting of: SH, O(CH<sub>2</sub>(n)O)<sub>n</sub>SH, NH(CH<sub>2</sub>(n)O)<sub>n</sub>SH, NH(CH<sub>2</sub>(n)NH)SH, S(CH<sub>2</sub>(n)O)<sub>n</sub>SH, and S(CH<sub>2</sub>(n)S)SH. n is 1-10, with S being attached to the nanocrystal. R<sub>2</sub> is a bond or selected from the group consisting of carbonyl, NH, S, CONH, COO, S, C<sub>1-10</sub> alkyl, carbamate, and thiocarbamate. When n and p are 1 or more, the resulting carbon or carbon chain may be substituted. Preferably, z is O. Preferably n and p are 1-5.